

REMARKS

Claims 1-25, 33-36, and 38 are pending in the present application. Claims 26-32 are withdrawn subject to a restriction requirement, and claim 37 is cancelled. Reconsideration of the application is respectfully requested in view of the following responsive remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

In the office action of November 3rd, 2006, the following actions were taken:

- (1) claims 6, 10, 11, 20, 23, 31 and 35 were rejected under 35 U.S.C. 112, second paragraph as being indefinite;
- (2) claims 1, 4, 6, 8, 9, 12, 13, and 15 were rejected under 35 U.S.C. 103(a) as being unpatentable over RD 39219;
- (3) claims 1, 4-6, and 8-15 were rejected under 35 U.S.C. 103(a) as being unpatentable over RD 39219 and JP 58-008357;
- (4) claims 1, and 4-15 were rejected under 35 U.S.C. 103(a) as being unpatentable over RD 39219 and JP 58-008357, in view of U.S. Published Application No. 2001/0039895 ("895") and/or U.S. Patent No. 5,470,816 ("816");
- (5) claims 1, 4-15, 17, 20-25, 33, 35 and 38 were rejected under 35 U.S.C. 103(a) as being unpatentable over RD 39219 and JP 58-008357 in view of U.S. Patent No. 5,362,536 ("536"), U.S. Patent Application No. 2003/0108708 ("708") or WIPO Published Application No. WO 03/032299 ("299");
- (6) claims 1-16 were rejected under 35 U.S.C. 103(a) as being unpatentable over RD 39219 and JP 58-008357 in view of U.S. Patent No. 2,957,004 ("004") or U.S. Patent No. 4,284,704 ("704");
- (7) claims 1-25, 33-35 and 38 were rejected under 35 U.S.C. 103(a) as being unpatentable over RD 39219 and JP 58-008357, combined with either '004 or '704, in view of '536, '708, or '299; and
- (8) claims 1-25 and 33-36, and 38 were rejected under 35 U.S.C. 103(a) as being unpatentable over RD 39219 and JP 58-008357, combined with either '004 or '704 in view of '536, '708, or '299, further in view of U.S. Patent No. 4,508,811 ("811") and Melles Griot Catalog (1995/96) pp. 49-4 through 49-5.

The Applicant assumes that all rejections not listed above, which did not appear in the final office action dated November 3<sup>rd</sup>, 2006, have been withdrawn by the Examiner.

It is respectfully submitted that the presently pending claims be reconsidered and allowed. Applicants submit that each and every amendment herein, and throughout the prosecution of the present application is fully supported by the specification as originally filed, and that no new matter has been added.

Rejection under 35 U.S.C. § 112, second paragraph

The Examiner has rejected claims 6, 20, 31 and 35 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner instructs that “polymethyl indolium” should read “polymethine indolium.” A general internet search indicates that this term is used (or misused according to the Examiner) throughout the literature, which indicates to the Applicant that one skilled in the art would know the general meaning of this term. As such, just as the Examiner recognized, one skilled in the art would recognize the meaning of this term in the context of the entire application and how it is used. The use of IUPAC approved nomenclature is not required under U.S. patent law to meet the requirements of 35 U.S.C. 112, second paragraph, as long as one skilled in the art would understand the meaning of a term in the context of the application as a whole. The Applicant asserts that this is the case in the present claim language. This being stated, the Applicant does not object at this time to amending this term as suggested by the Examiner, and thus, the Applicant has done so. Withdrawal of this rejection is respectfully requested.

Additionally, the Examiner has rejected claims 10, 11, and 23 under 35 U.S.C. § 112, second paragraph. The Examiner states that “ethyl acetate butyrate” is confusing. Again, one skilled in the art when viewing the Applicant’s specification as a whole would understand the meaning of this term. Ethyl acetate butyrate indicates a compound including a butyrate, an ethyl group, and an acetate group. Such interpretation of this term would be apparent to one of ordinary skill in the art. However, for the sake of expediting prosecution, the Applicant has made the suggested changes and therefore respectfully requests withdrawal of this rejection under 35 U.S.C. § 112, second paragraph.

Because these minor amendments are such that one skilled in the art would understand their meaning as being equivalent to the amended terms based on the context of the application as a whole, no new matter is added by either amendment.

Rejections Under 35 U.S.C. § 103

The Examiner has rejected all of the presently pending claims over one or more references in combination. The Applicant respectfully submits that these claims are patentable over the cited references for the reasons set forth below, and that the rejection should be withdrawn.

Before discussing the obviousness rejections herein, it is thought proper to briefly state what is required to sustain such a rejection. The issue under § 103 is whether the PTO has stated a case of *prima facie* obviousness. According to the MPEP § 2142, the Examiner has the burden and must establish a case of *prima facie* obviousness by showing the prior art reference, or references combined, teach or suggest all the claim limitations in the instant application. Further, the Examiner has to establish some motivation or suggestion to combine and/or modify the references, where the motivation must arise from the references themselves, or the knowledge generally available to one of ordinary skill in the art. The Applicant respectfully asserts the Examiner has not satisfied the requirement for establishing a case of *prima facie* obviousness in any of the rejections.

The RD 39219 Reference

Claims 1, 4, 6, 8, 9, 12, 13, and 15 were rejected under 35 U.S.C. 103(a) as being unpatentable over RD 39219. RD 39219 introduces an imaging medium for thermal imaging applications with near infrared radiation. The medium includes 1,3-diiminoisoindoline and/or a related phthalocyanine precursor material, a thermally cleavable adduct capable of generating a phenolic compound with reducing properties, and a near infrared absorbing dye. RD 39219 also lists binders as a possible addition to the composition.

The two independent claims (claims 1 and 33), from which all other noted claims depend were amended previously to include the requirement of development in less than about 1 msec when exposed to about 30 mW to about 50 mW of infrared radiation. RD 39219 does not teach development in less than 1 msec under any

conditions, let alone when exposed to about 30 mW to about 50 mW of infrared radiation.

The Examiner states that the limitations of power and duration added to the claims is not sufficient to overcome the prior art rejection of reference RD 39219 because a laser “can be focused down to approximately the wavelength of the laser as the diffraction limit of focusing is  $k\lambda/NA$ , where NA is the numerical aperture,  $\lambda$  is the wavelength and  $k$  is a proportionality factor.” Further, the Examiner states that the medium of RD 39219 “will record information when exposed to light for 0.1-0.5 msec at 30-50mW when the beam is sufficiently focused.”

However, just because something can be done (if formulated appropriately) does not mean that it is obvious to formulate the composition to do so, particularly when the application in the prior is so limited to development on paper. The fact that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient by itself to establish *prima facie* obviousness. According to M.P.E.P 2143.01, section IV:

A statement that modifications of the prior art to meet the claimed invention would have been “well within the ordinary skill of the art at the time the claimed invention was made” because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). See also *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1318 (Fed. Cir. 2000).

There are many factors that contribute to a rapidly developable and light stable color forming composition. Each component of the color forming composition can potentially influence the developing properties of the composition. For example, certain binders can either accelerate or hinder the developing times of various combinations of phthalocyanine precursor and infrared absorber. Other factors include the thickness of the color forming composition on the substrate, relative concentration of each component, and the properties of the infrared absorber and dyes themselves. The color forming compositions of the present invention are formulated for development in less than about 1 millisecond, which would be considered to be very fast by those skilled in the art.

Thus, RD 39219 does not teach each and every element of the claims and therefore, the Applicant requests withdrawal of the rejection of claims 1, 4, 6, 8, 9, 12, 13, 15, 33 and 35 under 35 U.S.C. 103(a) as being obvious over RD 39219.

Combination Rejections

All other rejections are based on obviousness, using RD 39219 and/or JP 58-008357 as primary references in combination with or in view of other references. As RD39219 has already been discussed, a brief discussion of JP 58-008357 is provided. First, it is noted that an English translation of JP 58-008357 was provided by the USPTO, which the Applicant recently received. In reviewing this translation, it appears to be cumulative to RD 39219 with respect to relevant points. This reference is related primarily to a heat sensitive copying paper. In the specification, particularly the examples, the compositions are described as being heated to 150 °C, where color change was noted. This reference does not seem to teach or suggest extremely fast development times as required by the currently pending claims. To the contrary, the examples read as though slow development times (relative to the claimed development times) occur.

This being stated, both of these references cited alone or in combination are deficient in their teachings for the same reasons set forth above. Again, the office action does not sufficiently identify any suggestion, teaching, or motivation to combine or modify the references to make the claimed invention, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. This element, which is very limiting with respect to development conditions, is just not present in the references, nor does it appear that compositions described therein would be developable as claimed by the Applicant. Many factors go into whether such fast development times are achievable.

Further, regarding the combinations *per se*, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d. 1430 (Fed. Cir. 1990). Furthermore, that the claimed invention may be within the capabilities of one of ordinary skill in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex Parte Levingood*, 28 USPQ2d 1300 (Bd. Pat. Ap. &

Inter. 1993); *In re Kotzab*, 217 F.3d 1365, 55 USPQ2d 1313 (Fed. Cir. 2000). As the balance of the rejections utilizes other secondary references, it is necessary to determine whether any of these secondary references provide the missing elements that are not found in the primary reference. None of these secondary references remedy the deficiencies of the primary references cited. Specifically, '536 (Fleming) does not cure the defects of the primary references, in that it does not teach of compositions that are developable using low power under fast development conditions as set forth in claim 1, and further, does not teach labeling of optical discs, as required by claim 33.

Additionally, as noted in the response dated August 14th, 2006, when a rejection utilizes a 35 U.S.C. 102(e) reference that is assigned to Hewlett-Packard as part of a 103 rejection, it is not proper to use that reference under 35 U.S.C. 103(a). For example, all rejections that utilize '708 (Anderson) as part of a combination rejection would fall under 35 U.S.C. 103(c). The present application and the '708 application were both under an obligation to assign to HP at the time each invention was made, and thus, all rejections that utilize the '708 publication should be withdrawn. The examiner did not address this issue in the final office action dated November 3<sup>rd</sup>, 2006. Therefore, the Applicant respectfully requests withdrawal of all rejections which utilize the '708 publication or a reason why this has not or will not be done.

Withdrawal of each of these rejections is respectfully requested

In view of the foregoing, Applicants believe that claims 1-25, 33-36 and 38 present allowable subject matter and allowance is respectfully requested. If any impediment to the allowance of these claims remains after consideration of the above remarks, and such impediment could be removed during a telephone interview, the Examiner is invited to telephone W. Bradley Haymond (Registration No. 35,186) at (541) 715-0159 so that such issues may be resolved as expeditiously as possible.

Please charge any additional fees except for Issue Fee or credit any overpayment to Deposit Account No. 08-2025.

Dated this 5<sup>th</sup> day of February, 2007.

Respectfully submitted,



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